



**CULINARY HERBS:
FROM GARDEN TO GOURMET**

Blackstone Community Clubhouse

Master Gardeners

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Plan For Today

- Exits & Restrooms
- PowerPoint mgeldorado.ucanr.edu
- References
- Propagating from seeds & cuttings
- Questions
- Publications for Sale

Culinary Herbs

- Definition & Latin Names
- Why Grow Herbs?
- Where to grow herbs and what they want
- Propagating – Seeds & Cuttings
- Harvesting & Preserving
- Herbs that Grow Well in El Dorado County

Definition

Any plant whose leaves, flowers, roots are used for flavor, fragrance, medicines, cosmetics or dyes.

Herbs are a human experience involving sight, touch, smell & taste.

Herb vs. Spice

- Spice
 - The hard parts of the plant such as roots, bark or seeds
- Herbs
 - The softer parts of the plant including the stems, leaves, flowers

Coriandrum sativum



Coriandrum sativum

- The Herb or herbaceous stage of the plant is Cilantro
- The Spice we know as coriander is the seed.
- Day length, sunlight and temperature influence flowering and seed setting.
- Daylight longer than 12 hours will cause cilantro to bolt. Dill also.

THINK OUTSIDE THE BOX



Kieffer Lime (*Citrus hystrix*)

Latin Names Matter

- Common Name vs. Latin name (or Botanical or Scientific)
- Remember, these are plants you're using for food – be sure you have the correct plant.
- Expect nurseries to put the botanical name on the tag.

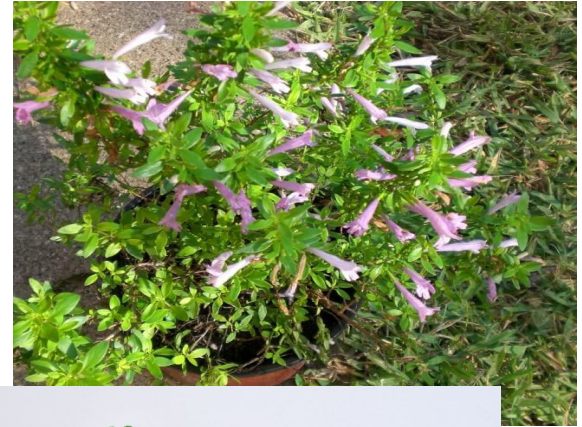
Coriandrum sativum – Coriander/Cilantro

- Vietnamese Coriander, *Persicaria odorata*
Herbaceous perennial, spreads via root system, invasive in mild-winter areas. Leaves have cilantro flavor.
- Mexican Coriander, *Eryngium foetidum*
Biennial herb grown as warm-season annual. To 16" tall, spiny. Cilantro flavored leaves.

Oregano

Mexican Oregano

Poliomintha longiflora



Cuban Oregano

Plectranthus amboinicus



Italian Oregano

Origanum vulgare



Why Grow Culinary Herbs

- Quality
- Healthy way to add flavor to food & beverages
- Fresh herbs always available
- Save money
- Exotic varieties
- They're beautiful
- Relieve stress
- Herbs are excellent source for pollinators

Herbs that attract Pollinators

Butterflies – Chives, thyme, marjoram, mint, parsley

Bees – Basil, lemon balm, lavender, sage, savory, rosemary, dill, thyme, chives, fennel, mint

Hummers – Lavender, sage, mint, rosemary, mexican oregano

Deer Resistant Herbs?????

- Sage
- Thyme
- Nepeta
- Oregano
- Mint
- Lavender
- Rosemary



HERB GARDEN SITES

Location

- 4 - 6 hours sun
- Well drained soil
- Freedom from woody plant roots & erosion
- Access to water
- Convenient for regular visits



photo from *The Herbalist's Garden*

Paths



Pots . . .



Tubs

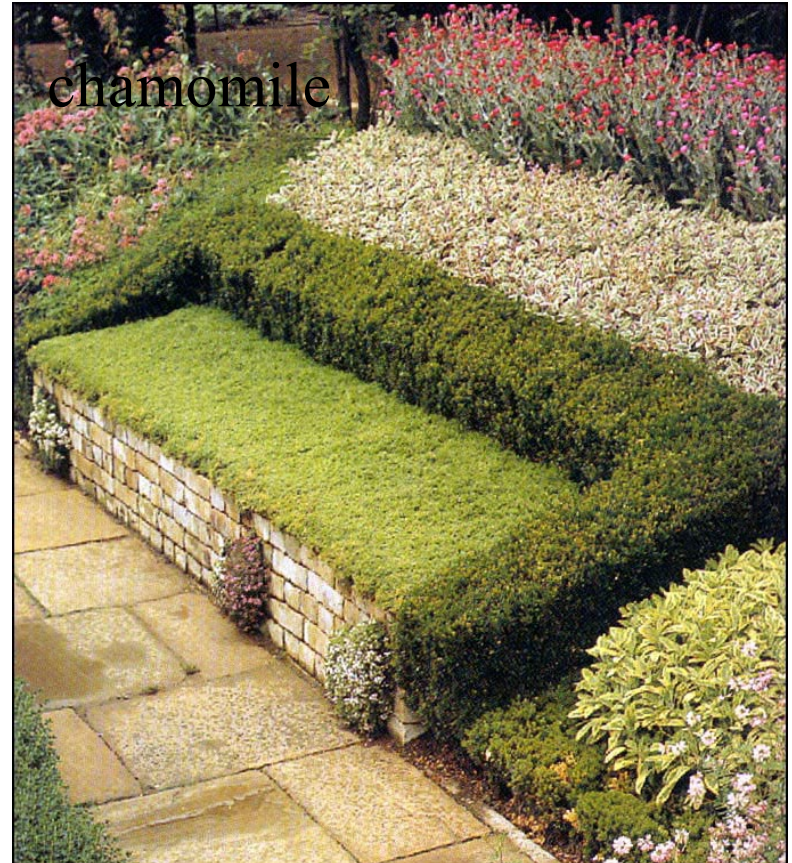


Containers



Container size is important

Bench



Rock Garden



Companion Plantings





PLANTING

Soil Composition

- Well drained
- Add organic matter
- Raised beds
- MULCH!!



MAINTENANCE

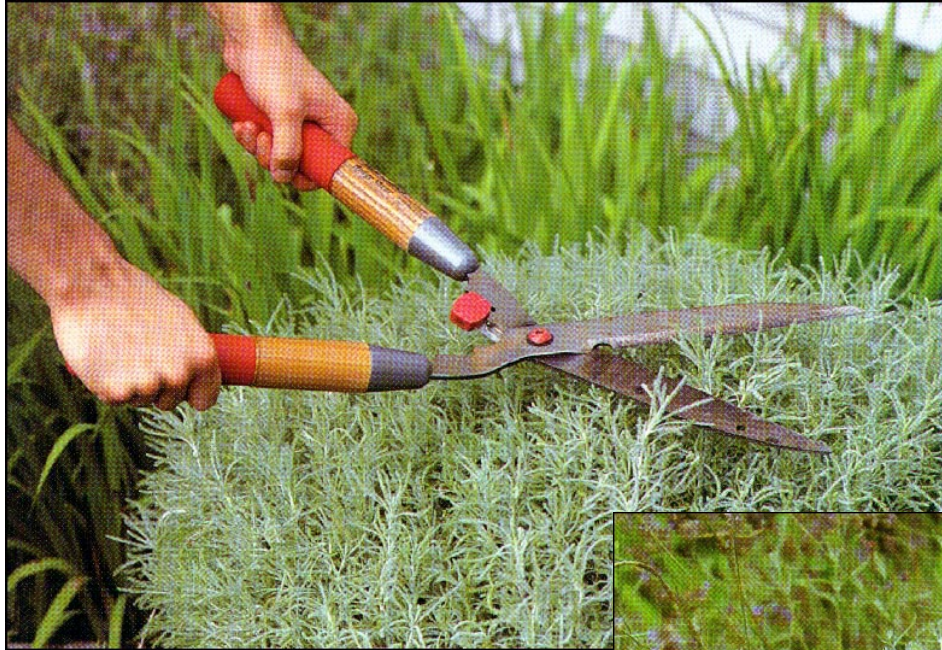
Irrigation

- Many herbs are drought tolerant
- Deep, infrequent watering
- Annuals may require more water (especially if in pots)
- Types of irrigation
 - Best - Soaker hoses & Drip irrigation
 - Not recommended - Overhead sprinklers & hand watering

Fertilizer

- Balanced fertilizer in spring
 - N : nitrogen
 - P : phosphorus
 - K : potassium
 - Worm Compost or castings or fish emulsion
- Think lightly, half strength
- Annual herbs

Pruning



Spring



Pinching



- Remove flower buds
- Cut back top growth
- Important for culinary herbs – promotes bushy growth & prevents plant from going to seed

Deadheading



Pests and Diseases

- Provide good air circulation
- Provide well drained soil
- Fertilize sparingly
- Herbs that repel pests:
 - Sage, Rosemary, Lavender,
Basil, Garlic and Mint



PROPAGATING HERBS

- Seeds
- Cuttings
- Layering
- Division

Propagating from SEEDS

- Select a sterile germinating medium.
- Select thoroughly clean containers.
- Fill container to $\frac{1}{4}$ " from top with moistened medium.
- Firm medium with fingers or block of wood to provide a uniform, flat surface.
- Sow seed thinly & uniformly at the depth recommended on seed packet, or 2 – 4 times the diameter of the seed.

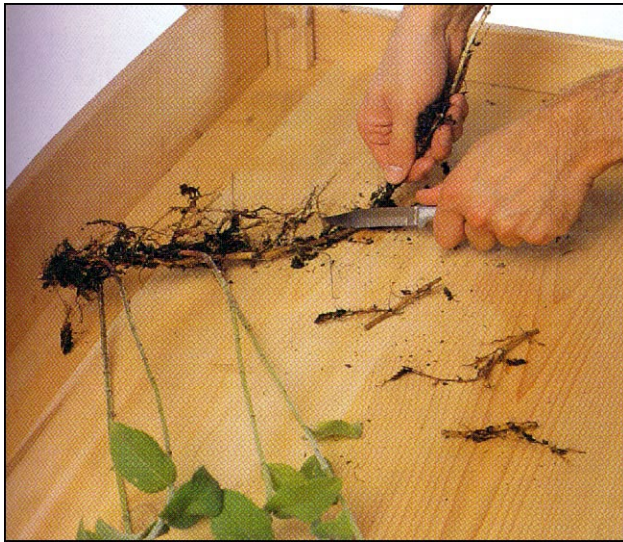
Propagating from Seed, con't.

- Moisten thoroughly using low pressure mist or place temporarily in tray to water from bottom. Keep soil uniformly moist.
- Cover with plastic dome & place on heat mat until first leaves appear.
- Then place in bright south facing window or under grow lights.

Propagating from Seed, con't.

- When first true leaves appear, begin fertilizing with half strength soluble fertilizer.
- Two weeks before planting, begin “hardening” the seedlings by gradually exposing them to the outdoor environment.

Cuttings



Root cuttings



Stem cuttings

Propagating from Cuttings

Softwood Stem Cuttings: Propagate at ne spring growth.

Semi-hardwood Cuttings: Propagate between mid-July to early September.

Hardwood Cuttings: Propagate between October to late winter.

Propagating from Cuttings, con't.

- Pre-moisten rooting medium.
- Fill pot $\frac{3}{4}$ full.
- Poke a hole with pencil or similar object.
- Cut stems and immediately place in water.
- Trim off lower leaves and trim size/quantity of upper leaves (soft/semi-hardwood).
- Recut stem just below node.

Propagating from Cuttings, con't.

- Re-dip in water.
- Immediately dip in rooting hormone (liquid or dry).
- Place gently into pot.
- Mist (soft/semi-hardwood).
- Place pot under some and mist daily (soft/semi-hardwood OR keep in dark cool area until roots have formed (hardwood)).

Layering



Layering

- Many plants self layer – mints, oregano, rosemary, thyme, savory & lavender
- Dig hole or use pot
- Fasten stem over hole
- Fill hole with soil and keep damp

Dividing



Dividing

- When: Early spring for fall blooming plants or fall for spring blooming plants
- Dig out root ball and soil
- Use knife, shovel, trowel to split off healthy sections.
- Good for chives, oregano, tarragon, sorrel

HARVESTING & PRESERVING

When & How Much



- In the morning
- Throughout the season
- When flower buds appear

Drying Herbs



- Remove discolored leaves
- Make small bundles
- Hang upside down
- Warm, airy, dry location
- Away from direct sunlight
- Good air circulation

Drying Trays



Good



Not So Good

Keep drying area free of dust. Done when “crispy” dryness.

Drying Seeds



Hang upside down in a paper bag.

Other Drying Methods

- Dehydrator
- Drying pantry

Storage

- Package whole leaves if possible
- Use airtight containers
- Store away from direct sunlight, heat and humidity
- If any moisture is detected after placing in storage container, it's not dry enough.

Freezing Herbs

- For herbs that lose flavor when dried
 - Cilantro, basil, chives
- Freeze whole
- Mince & freeze in water in ice cube tray
- Make into paste & freeze
 - 1/2 c oil/2 c packed herbs
 - Pesto

Resources

- Sacramento Master Gardeners:
<http://sacmg.ucanr.edu>
- Oregon State Extension Service:
<https://extension.oregonstate.edu/gardening>
- Rose Loveall, Morningsun Herb Farm Videos:
www.morningsunherbfarm.com
- The Kitchen Herb Garden, Rosiland Creasy, Tuttle Publishing
- Edible Landscaping, Rosiland Creasy, Sierra Club Books

**CULINARY HERBS THAT
GROW WELL
IN EL DORADO COUNTY**

Dill

Anethum graveolens

- Annual
- Appearance
 - Tall, single stem
 - Feathery, thread-like blue-green leaves
 - Flat umbel flower, 6" across
- Propagate from seed
- Uses
 - Leaves are used in salads and as a garnish for pickles
 - Seeds used as flavoring in cooked veggies

NOTE: Will bolt when day light reaches 12 hours.



Cilantro

Coriandrum sativum

- Annual
- Appearance
 - Bright green, finely grooved stems
 - Upper leaves finely divided
- Propagate: seeds
- Uses
 - Culinary: popular in Asian, Latin and African cooking
 - In shell fish and salads
 - Seeds used in baking and pickling
- Note: Will bolt when day light reaches 12 hours



Tarragon

Artemisia dracunculus

- Perennial
- Appearance
 - Linear to lance like, in groups of 3
- Propagate by cuttings, division
 - Seeds may not be “French tarragon”
- Uses
 - Culinary, “French Fines Herbs”
 - Used with fish, in herb butters and mayo, cream sauces and to flavor vinegar
- Note
 - Over-winter mulch
 - Keep soil from getting too wet



Sage

Salvia officinalis

- Perennial
- Appearance
 - Woody shrub with a wide variety of leaf size, shapes and colors
- Propagate by cuttings
- Uses
 - Attractive in wreaths and arrangements
 - Primary use is culinary in salads or flavoring for fatty meats; vinegars, butters
 - Dried to discourage insects



Thyme

Thymus vulgaris

- Perennial
- Appearance
 - Low evergreen shrub
 - Small white/pink flowers
- Propagation by layering
- Uses
 - Mostly culinary as flavoring or garnish
 - Garden ornamental,
- Note
 - Many species, and can range in height from 1" to 1'

Lemon Balm

Melissa officinalis

- Perennial
- Appearance
 - In clumps to 3'
 - Bright green leaves, deeply veined
- Use
 - Strong lemony scent is a good flavoring
 - Potpourri, sachets
- Note
 - Spreads rapidly
 - Good in pots
 - Prune to keep compact



Mints

Mentha spp

- Perennial
- Appearance
 - Shrubby to 3 ft
 - Glossy green leaves with small flowers in summer and fall
- Propagate by division when dormant
- Use
 - Culinary as flavoring or oil
 - Decorative ornamental
- Note
 - Very invasive, plant in pots
 - Many varieties



Bay

Laurus nobilis

- Evergreen tree or shrub
- Appearance
 - Tree/shrub, slowly growing to 40 feet in ground
 - Leathery green leaves
- Propagate from cuttings
- Use
 - Leaves as flavoring for soups, stews, sauces
- Note
 - Grows well and for a long time in pots
 - Good for topiary



Rosemary

Rosemary officinalis

- Perennial
- Appearance
 - Shrub with evergreen, needlelike leaves
 - Blue, lavender, white flowers
 - Upright & prostrate varieties
 - Propagate by layering or cuttings
- Uses
 - Landscape shrub
 - Culinary flavoring, dried or fresh



Lavender

Lavendula spp.

- Perennial
- Appearance
 - 6" to 4'
 - Green to gray narrow leaves, some fern-like
 - White to deep purple flowers on spikes
- Propagate by layering
- Uses
 - Mostly aromatic, perfumes, potpourri
 - Excellent in fresh & dried arrangements
- Note:
 - Many, many varieties



Scented Geranium

Pelargonium geraniaceae

- Perennial
- Appearance
 - Varied and interesting leaf patterns
 - Insignificant flowers
- Propagate by stem cuttings
- Uses
 - Culinary in teas, jellies
 - Potpourri
- Note
 - Scent is in the leaves: rose, lemon, peppermint, apple, coconut, nutmeg, etc
 - Frost sensitive



Lemon Verbena

Aloysia triphylla

- Perennial
- Appearance
 - Woody shrub to 5+' in EDC
 - Deciduous
 - Long pale, green pointed leaves
- Propagate from stem cuttings
- Uses
 - Culinary in tea
 - Lemon flavoring in salad dressings
 - Potpourri
- Note
 - sensitive to cold, protect in winter



Calendula

Calendula officinalis

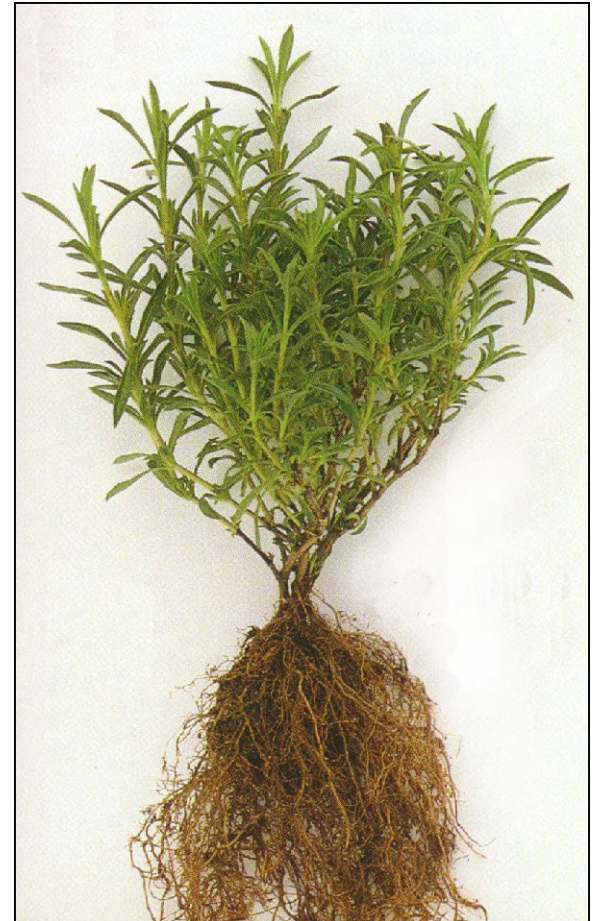
- Annual
- Appearance
 - Erect
 - Many branches
 - Solitary terminal flower, ranging from pale yellow to deep orange
- Propagate - seeds
- Uses
 - Flower petals are used in salads and as garnish



Winter Savory

Satureja montana

- Perennial
- Appearance
 - Woody compact shrub, 6"-12"
 - Small white or lilac flowers
 - Dark green, lance shaped leaves
- Propagate from cuttings
- Uses
 - Culinary herb for fish and meats
- Note
 - Harvest all winter
 - Summer savory - *Satureja hortensis*



Parsley

Petroselinum crispum

- Biennial
- Appearance
 - Curled to flat green leaves
- Propagate from seed
- Uses
 - Culinary flavoring & decoration;
 - Thought to aid digestion
- Note:
 - Seeds slow to germinate, soak in hot water or freeze overnight; remove flower stalks to extend life in second year.



Chives

Allium schoenoprasum/

A. tuberosum

- Perennial, Appearance
 - Tubular or flat blade-like leaves
 - Purple or white ball-shaped flowers
 - 6" - 2'
- Propagate
 - seeds or division
- Uses:
 - Culinary: flowers for garnish, vinegars
 - Leaves & purple flowers used for dyes
- Note:
 - Chives are excellent ornamental plants



Garlic

Allium sativum

- Annual
- Appearance
 - Flat bladelike leaves
 - Purple or white flowers
 - 18" - 2'
- Propagate - cloves
- Uses:
 - Culinary: flowers for garnish, vinegars
- Notes
 - Many cultivars
 - Valuable companion plant
 - Cut off or bend back flower stalks as they form

Oregano/Marjoram

Origanum vulgare/marjorana

- Perennial
- Appearance
 - Green, golden colors with pink white , purple flowers
 - 6" - 3'
- Propagate by division or cuttings (hybridize readily)
- Uses
 - Attracts bees & butterflies
 - Overall flavoring
 - Leaves dry well
- Notes
 - Oregano hardier and more flavorful than marjoram
 - Excellent ornamental plants



Basil

Ocimum basilicum

- Annual
- Appearance
 - 6" - 2'
 - Green, purple leaves
 - White, pink, lavender flowers
- Propagate from seed or cuttings
- Uses
 - Culinary: pesto, herbal vinegars, overall flavoring
- Notes
 - Works well in containers
 - Frost sensitive
 - Many varieties: "Purple," "Lemon," "Thai," etc.



